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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/060,020

01/29/2002

Terence Edward Sumner

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4941

23483

7590

09/29/2006

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BOSTON, MA 02109

EXAMINER

HO, DUC CHI

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 09/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

### Office Action Summary

Application No.

10/060.020

**Applicant(s)**

SUMNER ET AL.

**Examiner**

Duc C. Ho

## Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,7-16,19-21 and 23 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,7-16,19-21 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

***Response to Amendment***

1. Applicant's amendment after final Office action is persuasive and, therefore, the finality of that action is withdrawn.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).
4. Claims 1-2, 5, 15-16, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gunnarsson et al. (U.S. 2003/0118015), hereinafter referred to as Gunnarsson, in view of Angus (US 6,538,561).

Regarding claim 1, Gunnarsson discloses location based notification of WLAN availability via wireless communication network.

The wireless network 10-fig.2 tracks the current location of a mobile terminal 60-fig.2 associated with a user and sends a notification to a subscriber, i.e., a beep, via the mobile terminal 60 when there is a WLAN in the vicinity of the user's current location, wherein the notification could be sent from another device, i.e, a mobile location detection device, via the WWAN such as the Internet 40-fig.2 see 0018. Based on the notification, the WLAN interface of the computing device 70-fig.1 is activated for connection, wherein the mobile terminal and the computing device may form an integrated unit, see abstract.

Gunnarsson, however, does not expressly teach the WWAN including a narrowband paging network.

One skill in the art would recognize the advantage of employing a mobile station, i.e., a laptop computer or a cellular phone, capable of functioning as an alphanumeric narrowband paging device in a WLAN and WWAN environment. Since a mobile station when equipped with a function of a two-way message paging device, will be capable of sending wireless messages that may comprise an alphanumeric or voice message to which an electronic file, such as a text document or predetermined messages, may be attached. In other words, the user's mobile station is capable of receiving an urgent message generated by a failed computer server alerting the user about the need to be on-site for immediate solutions or a vending machine that needs to be re-supplied.

Angus discloses data communication network for minimizing toll-charge dependent links and method of operation.

The mobile stations 121-123, and 131-133-fig.1 are the devices capable of sending and receiving alphanumeric text messages employing narrowband paging network, see col. 4-line 57 to col. 5-line 18, and col. 7, lines 37-47.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Gunnarsson with Angus.

The suggestion/motivation for doing so would have been to provide a mechanism for communication in a wireless network such that the user's mobile station is capable of receiving an urgent message generated by a failed computer server alerting the user about the need to be on-site for immediate solutions or a vending machine that needs to be re-supplied.

Therefore, it would have been obvious to combine Gunnarsson with Angus to obtain the invention as specified in claim 1.

Regarding claims 2, and 21, the mobile terminal 60-fig. 2 is able to receive data such as carrier frequency of WLAN 20-fig.2 via the Internet, see 0023.

Regarding claim 5, Gunnarsson discloses location based notification of WLAN availability via wireless communication network. The wireless network 10-fig.2 tracks the current location of a mobile terminal 60-fig.2 associated with a user and sends a notification to a subscriber, i.e., a beep, via the mobile terminal 60 when there is a WLAN in the vicinity of the user's current location, wherein the notification could be sent from another device, i.e, a mobile location detection device, via the WWAN such as the Internet 40-fig.2 see 0018. Based on the notification, the WLAN interface of the

computing device 70-fig.1 is activated for connection, wherein the mobile terminal and the computing device may form an integrated unit, see abstract.

The mobile 60-fig.1 may only be alerted to the presence of WLAN 20 when it is being serviced within sector D1, and might not be so alerted in sectors D2 and D3, see 0020-page 3.

Gunnarsson, however, does not expressly disclose (1) a list of WLANs, and (2) the WWAN including a narrowband paging network.

It would have been obvious to one of ordinary skill in the art, at the time invention was made, to employ a list of plurality of WLANs in order to alert the user in advance so that even though he/she is currently with a particular WLAN, but he/she also understand that his or her device is also within a proximity of other WLANs for data exchange or for a particular service.

One skill in the art would recognize the advantage of employing a mobile station, i.e., a laptop computer or a cellular phone, capable of functioning as an alphanumeric narrowband paging device in a WLAN and WWAN environment. Since a mobile station when equipped with a function of a two-way message paging device, will be capable of sending wireless messages that may comprise an alphanumeric or voice message to which an electronic file, such as a text document or predetermined messages, may be attached. In other words, the user's mobile station is capable of receiving an urgent message generated by a failed computer server alerting the user about the need to be on-site for immediate solutions or a vending machine that needs to be re-supplied.

Angus discloses data communication network for minimizing toll-charge dependent links and method of operation.

The mobile stations 121-123, and 131-133-fig.1 are the devices capable of sending and receiving alphanumeric text messages employing narrowband paging network, see col. 4-line 57 to col. 5-line 18, and col. 7, lines 37-47.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Gunnarsson with Angus.

The suggestion/motivation for doing so would have been to provide a mechanism for communication in a wireless network such that the user's mobile station is capable of receiving an urgent message generated by a failed computer server alerting the user about the need to be on-site for immediate solutions or a vending machine that needs to be re-supplied, and that the user would understand that his or her device is also within a list of proximity of other WLANs for data exchange or for a particular service.

Therefore, it would have been obvious to combine Gunnarsson with Angus to obtain the invention as specified in claim 5.

Regarding claims 15, 19, and 20, these claims have similar limitations as claim 1. Therefore, it is rejected under Gunnarsson-Angus for the same reasons set forth in the rejection of claim 1.

Regarding claim 16, the mobile terminal 60-fig.2 is capable of receiving data from the WLAN 20-fig.2 via the Internet 40-fig.2.

5. Claims 7-9, 12-14, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gunnarsson, in view of Eaton et al.(US 6,888,811), hereinafter referred to as Eaton.

Regarding claim 7, Gunnarsson discloses all claimed limitation, except sending information to a control point of the WLAN to authorize the wireless device to utilize a service through the WLAN.

Eaton discloses communication system for location sensitive information and method therefor. The SNAP130-fig.3 can communicate with the processor 156-fig. 3 to authorize the portable device 100 to have a service through the WLAN114, see col. 11, lines 28-46.

It would have been obvious to one of ordinary skill in the art, at the time invention was made, to employ an access point as taught by Eaton into the system of Gunnarsson so that a user would know for sure that his or her device is authorized to utilize the service that the WLAN offered due to the granted access of the WLAN's access point.

Regarding claim 8, according to Eaton, the portable device 100-fig.3 gets authorization for accessing to the WLAN 114 via the SNAP 130-fig.3.

Regarding claim 9, Gunnarsson teaches billing service for usage of service through the WLAN20-fig.1, see 0016.

Regarding claim 12, in Gunnarsson the Internet 40-fig.2 is coupled to a WLAN 20-fig.2. The connection to the Internet is in proximity to the WLAN 20.

Regarding claim 13, in Eaton the portable device 100 is able to access to the Smart Network Access Point directly or indirectly to a geo-location network for proximity to a WLAN from the location information 146-fig. 3.

Regarding claim 14, in Eaton the portable device 100 is able to use location information 120-fig. 2 to approximate proximity to a WLAN.



Regarding claim 23, in Gunnarsson, the Internet 40-fig. 2 is capable of having connections that includes narrowband packet data connection, such as paging, see 0022.

6. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gunnarsson, in view of Eaton, and further in view of Juha Ala-Laurila et al. (Wireless LAN access network Architecture for wireless devices, EE time, Dec,5 2001-IDS), here in after referred to as Laurila.

Regarding claims 10-11, Gunnarsson and Eaton disclose all claimed limitations, except validating the identity of the wireless device before permitting access to the WLAN.

Laurila discloses wireless LAN access network architecture for mobile operators. the authentication server-fig. 2 is used for validating and authenticating the identity of the user of service before permitting access to the WLAN for services, see page 84, at the heading "authentication server" and the "access controller".

It would have been obvious to one of ordinary skill in the art, at the time invention was made, to employ a step of validating the identity of the wireless device before permitting access to the WLAN as taught by Laurila into the combination system of Gunnarsson and Eaton in order to provide authentication and billing services for thousand of users potentially using the WLAN services.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Ho whose telephone number is (571) 272-3147.

The examiner can normally be reached on Monday through Friday from 7:00 am to 3:30 pm.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner



Duc Ho

09-27-06